

CLAIMS

1. A heat fusible conjugate fiber produced by high-speed melt spinning, which comprises a first resin component having an orientation index of 40% or higher and a second resin component having a lower melting or softening point than the melting point of the first resin component and an orientation index of 25% or lower, the second resin component being present on at least part of the surface of the fiber in a lengthwise continuous configuration.
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2. The heat fusible conjugate fiber according to claim 1, having a heat shrinkage of 5% or less at a temperature higher than the melting point or softening point of the second resin component by 10°C.
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3. The heat fusible conjugate fiber according to claim 1 or 2, which is produced by a process including, after the spinning, a heat treatment or a crimp treatment but no drawing.
4. The heat fusible conjugate fiber according to any one of claims 1 to 3, having a sheath-core configuration in which the first resin component makes the core, and the second resin component makes the sheath.
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5. The heat fusible conjugate fiber according to any one of claims 1 to 4, wherein the first resin component comprises polypropylene, and the second resin component comprises high-density polyethylene.
- 20 6. A nonwoven fabric produced by providing a carded web comprising the heat fusible conjugate fiber according to claim 1 and heat fusing the intersections of the fibers constituting the web.
7. A bulky nonwoven fabric comprising heat fusible conjugate fibers comprising two components having different melting points, formed by heat fusing the intersections of the fibers, and having a specific volume of 95 cm³/g or more, a strength per basis weight of 0.18 (N/25 mm)/(g/m²) or higher, and a bulk softness per unit thickness of
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0.14 N/mm or less.

8. The bulky nonwoven fabric according to claim 7, which is produced by providing a carded web and heat fusing the intersections of the fibers in the web by blowing hot air.
- 5 9. The bulky nonwoven fabric according to claim 7 or 8, wherein the heat fusible conjugate fiber is the heat fusible conjugate fiber according to claim 1.